Digital Multimeter/Infrared Thermometers

Multimeter

MODEL NO. FLU88

Features:

- 10 MΩ input impedance.
- Reads volts and amps in AC and DC.
- Frequency measurements for MAP sensors.
- % duty cycle measurements.
- Milliseconds pulse width measurements (0.002 – 1,999.9).
- R.P.M. measurements with inductive probe.
- Low ohms function.
- Records minimum, maximum and average readings.
- Automatic Touch Hold® triggers the meter to capture stable, non-zero readings.
- Smoothing™, a Fluke exclusive feature — helps smooth out readings when the input signal is varying, such as r.p.m. measurements.
- Input Alert™ sounds an alarm when the test leads are in the current input jacks and the rotary knob is set to volts.
- Fully overload protected on ohms, volts and amps.
- Rubber meter holster and rugged hard shell carrying case.
- Deluxe test leads with interchangeable test probes and wide alligator clips.
- Sleep mode.
- Backlit display.

Includes:

- FLUC81Y Holster with Flex-Stand™.
- FLURPM80 Inductive pickup.
- FLUC800 Carrying case.
- FLUTL224 Flexible test leads.
- FLUTP220 Industrial test probes.
- FLUAC85A Large jaw alligator clips.

FLU88

FLUTL224

FLUTP220

- FLU830828 Fuse, 1 amp, 600 volt (installed).
- FLU847793 Fuse, 15 amp, 600 volt (installed).
- 9 volt battery (installed).
- User's manual.
- Quick reference guide.

Accessories:

See page 1-4.

WARRANTY: Lifetime limited on meter.

Specifications:

Function	Range	Accuracy	Resolution
DC Volts	400 mV – 300 volt	0.15%	0.1 mV
AC Volts	400 mV – 300 volt	1.5%	0.1 mV
DC & AC Current	400 mA – 10 amp	DC 1.5% AC 2.5%	0.01 µA
Resistance	400 Ω – 40 MΩ	0.2%	0.1 Ω 0.01 Ω in Lo-ohms mode
Frequency	199.99 Hz – 199.99 kHz	0.01%	0.01 Hz

Supplied By: Fluke/Snap-on/Sun

RTEMPB1

Minitemp™

Model No. RTEMPB1

Features:

- Pocket-sized and easy to use.
- Backlit display.
- Select ° F or ° C.
- Optional wrist strap and soft carrying pouch.

Specifications:

- Temperature range: 0 – 500° F (-18 – 260° C)
- D:S (Distance-to-Spot size): 6:1
- Response time: 500 mSec, 95% response
- Emissivity: Preset at 0.95
- Accuracy: ± 2%, or ± 3° F (± 2° C) whichever is greater

Enhanced Infrared Thermometer

Model No. RTEMP60PB

Takes simultaneous readings: Current temperatures plus Max., Min., Avg. and Differential readings.

RTEMP60PB

Features:

- Gun-style body.
- Offset laser.
- Backlit LCD display.
- Functions include Hold, Hi and Lo alarms, Adjustable Emissivity and Continuous Max. Temperature display.
- Temperature measurements made in .10 of degree CE conformity.

Specifications:

- Temperature range: 25 – 932° F (-32 – 500° C).
- D:S (Distance-to-Spot size): 8:1

Includes:

- RTEMPPBA Plastic storage case.

Digital Multimeter

Multimeter

MODEL NO. FLU87III

Features:

- 10 MΩ input impedance.
- High resolution mode, 4-1/2 digit (19,999 counts).
- Displays relative (change) readings.
- Records minimum, maximum and average readings. 250 µs peak minimum/maximum for true peak transient capture.
- Automatic Touch Hold® triggers the meter to capture stable, non-zero readings.
- Sleep mode.
- Backlit display for easy operations in dark, hard-to-see work areas.
- (8) measurement functions (listed below).

Includes:

- FLUC81Y Yellow protective holster with Flex Stand™.
- FLUTL75 Test leads.
- FLU203411 Fuse, 440 mA, 1,000 volt (installed). Qty. 1
- FLU203403 Fuse, 11 amp, 1,000 volt (installed). Qty. 1
- FLUAC72 Alligator clips.
- 9 volt battery (installed).
- User's manual.
- Quick reference guide.

Specifications:

Function	Maximum	Accuracy	Max. Resolution
DC Volts	1,000 volt	± (0.05% + 1)	0.1 mV
AC Volts	1,000 volt	± (0.7% + 2)	0.1 mV
DC Current	10 amp	± (0.2% +2)	0.01 µA
AC Current	10 amp	± (1.0% + 2)	0.1 µA
Resistance	40 MΩ	± (0.2% + 1)	0.1 Ω
Capacitance	Range 5 nF – 5 µF	± (1.0% + 3)	0.01 nF
Frequency	Range 199.99 Hz – 199.99 kHz	± (0.005% + 1)	0.01 Hz
Conductance	40 ns	± (1.0% + 10)	0.01 ns

Accessories:

See page 1-4.

WARRANTY: Lifetime.

FLU87III

FLU179

Multimeter

MODEL NO. FLU179

Features:

- True RMS meter.
- 10 MΩ input impedance.
- Min./Max./Avg. record.
- Automatic Touch Hold® triggers the meter to capture stable, non-zero readings.
- Now has temperature function.
- Sleep mode.
- Backlit display.
- (9) measurement functions (listed below) plus diode test and audible continuity.

Includes:

- FLUTL75 Test leads.
- FLU203411 Fuse, 440 mA, 1,000 volt (installed).
- FLU203403 Fuse, 11 amp, 1,000 volt (installed).
- FLU80AK Temperature probe.
- 9 volt battery (installed).
- User's manual.

Accessories:

See page 1-4.

WARRANTY: Lifetime.

Specifications:

Function	Maximum	Accuracy	Max. Resolution
DC Volts	1,000 volt	0.09%	0.1 mV
AC Volts	1,000 volt	1.0%	0.1 mV
DC & AC Current	10 amp	DC 1.0% AC 1.5%	.01 µA .01 µA
Resistance	50 MΩ	.09%	0.1 Ω
Capacitance	Range 1.0 nF – 9,999 µF	± (1.2% + 2)	
Frequency	Range 5 Hz – 100 kHz	± (0.1% + 1)	
Temperature	752° F	± 1.0%	0.1° F

Supplied By: Fluke

Digital Multimeter

Multimeter

Model No. FLU73-3

Features:

- 10 MΩ input impedance.
- Auto or manual range selection.
- Rugged, durable, removable holster with Flex-Stand™.
- Digital display with analog bargraph.
- Automatic Touch Hold® triggers the meter to capture stable, non-zero readings.
- Continuity beeper.
- Diode test.
- Fused current inputs.
- Protection to 600 volt and overvoltage transients to 4 kV.
- (5) measurement functions (listed below).

FLU73-3

Specifications:

Function	Maximum	Accuracy	Max. Resolution
DC Volts	600 volt	0.3%	0.1 mV
AC Volts	600 volt	2.0%	1.0 mV
DC & AC Current	10 amp	1.5%/2.5%	0.01 µA
Resistance	32 MΩ	0.5%	0.1Ω

Includes:

- FLUC70Y — Yellow protective holster with Flex-Stand.
- FLUTL75 — Test leads.
- FLU871173 — Fuse, 630 mA, 250 volt.
- FLU203403 — Fuse, 11 amp, 1,000 volt.
- 9 volt battery (installed).
- User's manual.

Accessories:

See page 1-4.

WARRANTY: Lifetime.

Our Customer Service Values!

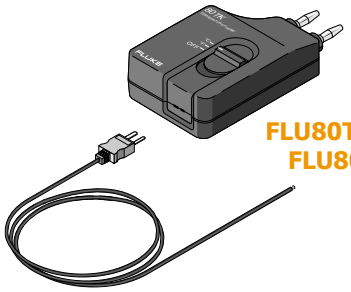
- Customers need only make one phone call to place an order or satisfy a concern.
- Each transaction is treated as the most important of the day!
- All transactions are conducted with the highest degree of honesty, integrity and professionalism.
- We maintain an ongoing commitment to continuous improvement through associate training in both product knowledge and customer service.
- We appreciate your business!

Supplied By: Fluke

Authorized Tool and Equipment Program

TO ORDER CALL: 1-877-HDEQUIP (433-7847)

Digital Tester Accessories



FLU80TK with FLU80PK1

Thermocouple Adaptor

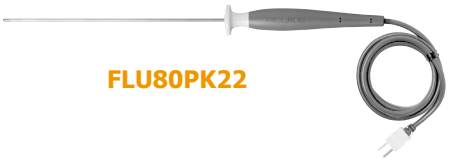
Model No. FLU80TK

Converts any Fluke DMM into a thermometer. Low cost, versatile unit uses interchangeable K-type thermocouples. (1) Universal FLU80PK1 probe included. The following K-type probes can be used with the FLU80TK.

Universal Probe

Model No. FLU80PK1

Universal probe can be immersed in non-corrosive liquid for determining engine or transmission oil temperatures, clamped under a bolt head or held against surfaces with a hose clamp or locking pliers. Range: -40 – 260° C (-40 – 500° F).



FLU80PK22

SureGrip™ Immersion Probe

Model No. FLU80PK22

General purpose probe for immersion in liquids such as coolant, brake fluid and power steering. Protected by Inconel sheath. Range: -40 – 1090° C (-40 – 1,994° F).

FLU80PK3A

Surface Probe

Model No. FLU80PK3A

Surface probe for flat surfaces. Ideal for tire surface measurements. Very fast responding. Not suitable for exhaust temperatures. Range: 0 – 260° C (32 – 500° F).

FLU80PK24

SureGrip™ Air Probe

Model No. FLU80PK24

For measuring exhaust temperatures (gasoline and diesel), air conditioning and heater outlet register temperatures and engine induction system air temperature. Range: -40 – 816° C (-40 – 1,500° F).

FLU80PK26

SureGrip™ General Purpose Probe

Model No. FLU80PK26

Exposed thermocouple attached to 6" rod for general purpose measurements. Ideal for engine block temperature measurements, exhaust manifold runner comparisons and applications requiring minimal clearance access with a rigid probe. Range: -40 – 816° C (-40 – 1,500° F).

FLUTP220

SureGrip™ Test Probes

Model No. FLUTP220

Sharp heavy-duty stainless steel tipped.

FLUTL224

SureGrip™ Flexible Test Leads

Model No. FLUTL224

Set of (1) red and (1) black test leads. Right-angle connector on one end and straight connector on the other.

FLUI410

AC/DC Current Probe

Model No. FLUI410

Measure starting and charging current up to 400 amps.

Large Jaw Alligator Clips

Model No. FLUAC85A

Durable, rugged and insulated for use with FLUTL224. Set of (1) red and (1) black.

WARRANTY (ALL PRODUCTS):
One year on all accessories.

Timing Lights/Ignition System Tester/Timing Gauge

MT1221

Timing Light

Model No. MT1221

Features:

- High-tech internal circuitry.
- Bright, high intensity Xenon flash tube.
- Overall swept-back design for safety.
- Ergonomic, one-handed handle design.
- Custom 7' lead set with color-coded clips attaches to battery and the inductive pickup easily locks on the #1 cylinder spark plug wire.

MT125

Timing Light, Self-Powered

Model No. MT125

This timing light is ideal for use on motorcycles where the battery is hard to access or there is no battery. Only one inductive #1 cylinder hookup is needed. Uses two "D" cell batteries (included).

MTP08-0122

Ignition System Tester

Model No. MTP08-0122

This ignition system spark tester uses an adjustable spark gap from 0 – 10 mm to test the integrity and strength of the ignition system.

GA555MA

Motorcycle Timing Gauge

Model No. GA555MA

Features:

- Find top dead center (TDC) without having to remove the cylinder head.
- Check ignition and cam timing without removing the fuel tank.
- Compact design for cramped quarters on many motorcycles.

Specifications:

- Range: 0 – 5 mm
- Increments: 0.01 mm

Includes:

- Gauge with black dial face, yellow graduations and hands and red bezel.
- 14 mm adaptor with locking collar that screws into spark plug hole.
- 1.5" (38.1 mm) l, 0.19" (4.8 mm) diameter contact.
- 2.0" (50.8 mm) l, 0.19" (4.8 mm) diameter contact.
- Storage case with window.

MTP08-0193

IgnitionMate

Model No. MTP08-0193

The IgnitionMate makes ignition system troubleshooting easier, quicker and more precise and helps eliminate unnecessary replacement of components to determine the failure. It is an affordable and simpler alternative to the oscilloscope.

Features:

- Allows the effective use of peak voltage values now common in factory service manuals.
- Can be used for on-road testing for intermittent faults which are difficult to trace.
- Both pulsed and constant signals can be monitored and automatically displayed.
- Comes with impact-resistant rubber guard.
- Complete kit includes a storage and travel case and detailed instructions.

Authorized Tool and Equipment Program

TO ORDER CALL: 1-877-HDEQUIP (433-7847)

Exhaust Gas Collection System and Analyzer/Leak Down Tester

KLS359641

MC750 Mobile Exhaust Gas Collecter System

Model No. KLS359641

This mobile exhaust gas collection system will provide a safe working environment while running engines indoors. Just connect the rubber collector ends to the engine exhaust pipes and route the blower hose outside of the building. The blower will extract exhaust fumes at any r.p.m. Additional length of hoses are available to suit specific needs.

Features:

- Compact mobile service cart with durable painted surface.
- Locking swivel casters.
- Quiet operation.
- Single or dual exhaust.
- (2) 3" x 5' exhaust hose with heat resistant rubber collectors.

Specifications:

- 110 volts
- Cabinet size: 24" l x 16" w x 25" h
- Top storage cabinet size: 24" l x 16" w x 3" d
- Side storage: 8" w x 15" d x 16" h
- Motor: 115 volt, 60 Hz x 6.4 amp x 3,410 r.p.m. x 1/2 hp
- Maximum pressure: 170 mm Aq
- Maximum volume: 20 $m.^3$/minute (CMM) or 706 $ft.^3$/minute (c.f.m.)

Accessory:

KLS359647 10' x 3" hose for gas collector. Maximum temperature rating: 400°

KLS379628

MC700 Exhaust Gas Analyzer

Model No. KLS379628

Exhaust gas analyzers may be the most helpful diagnostic tool in any shop. Check combustion efficiency at all r.p.m.s to detect possible problems or potential performance gains. The K&L exhaust gas analyzer is a lightweight, portable unit with digital display using 110 volts/50 watts of power.

Features:

- Detects fuel-related problems.
- Check jetting: Too lean, too rich, unbalanced.
- Find vacuum and exhaust leaks.
- Troubleshoot electrical glitches.
- Work in conjunction with dynamometers for more valuable test information.
- Digital front panel display, LED readout.
- Hook up to PC or printer for copy of test results with optional CD and RSC-232C cable.
- Use for combustion diagnostics and EPA emission standards.

NOTE: Do not use with Port to USB Converter. System requires RS32 Port.

MTP08-0126

4-Stroke Leak Down Tester

Model No. MTP08-0126

Use the 4-Stroke Leak Down Tester to check the amount of cylinder leakage past the rings, head gasket, intake and exhaust valves on four-stroke engines.

Features:

- Regulator, gauge, and 10, 12 and 14 mm spark plug thread hoses included.
- Speeds up troubleshooting and helps to isolate bad components.
- Packed in a convenient carry box, complete with instructions.
- Made in the U.S.A.

Replacements:

MTPC08-126A	Gauge, Pressure Test
MTPC08-126E	Regulator, Pres Test
MTP08-126X	Hose Assembly 10 mm
MTP08-126Y	Hose Assembly 12 mm
MTP08-126Z	Hose Assembly 14 mm

Supplied By: K&L Supply/Motion Pro

Auxiliary Fuel Tanks/Emissions Analyzer

MTP08-0032

Auxiliary Fuel Tank

Model No. MTP08-0032

For use when tuning a motorcycle with the gas tank removed. Includes 4' of 1/4" fuel line and an in-line fuel petcock. On fuel-injected motorcycles, use the MTP080189 Deluxe Auxiliary Fuel Tank. Tank can also be used for refilling transmission oil on some late model motocross bikes. Capacity is 2,000 cc or 1/2 gallon.

MTP080189

Deluxe Auxiliary Fuel Tank

Model No. MTP080189

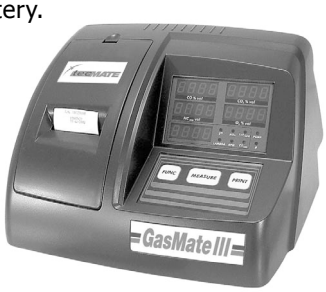
Our original Auxiliary Fuel Tank has been redesigned to be used on new fuel-injected motorcycles as well as standard carburetor bikes. The petcock has been upgraded for easier opening and closing and a fuel return has been built into the cap. The bottle has been correctly graduated for those wanting to measure exact amounts of gear oil or other fluids. Includes 4' of 1/4" fuel line. Capacity is 2,000 cc or 1/2 gallon.

MTP080222

TecMate StandMate

Model No. MTP080222

The StandMate was designed to be used as a shop caddy holding TecMate diagnostic tools. It will also hold Motion Pro's auxiliary fuel tank. The convenient tray holds tools, adaptors or even a battery.



MTP080190

GasMate III

Model No. MTP080190

The GasMate III is a lightweight, portable 3-gas analyzer that precisely measures Hydrocarbons, Carbon Monoxide and Carbon Dioxide emissions on 4-stroke and 2-stroke engines. Use the GasMate III to: Verify jetting to determine if it is lean, rich or unbalanced, adjust fuel injection or carburetor mixture for optimum performance, check combustion efficiency at all r.p.m.s, find vacuum and exhaust leaks, check vehicle emission system and troubleshoot computer control systems. Optional cartridges make the GasMate a 5-gas analyzer that can check Oxygen and NOx as well.

Features:

- Weighs just 7 lbs.
- Fast 1 minute warm up. 8 – 15 seconds response time after warm up.
- Large easy-to-read digital display.
- Optional cartridges available to check Oxygen and NOx.
- Automatic scale zeroing maintains high accuracy.
- RS232 serial port for PC connection (requires optional software).
- Conforms to the strictest standards including OIML Class 1/BAR () and those of Harley-Davidson®.
- Multiple fuel and particle filters with large easily maintained condensate trap.

Accessories:

MTP080190B	O_2 Cell
MTP080190C	NOx Cell
MTP080190D	Inductive r.p.m. pickup
MTP080190E	Printer (unnecessary if software for PC connection is used, let the PC handle printing)
MTP080190F	4-Way Manifold (allows quick selection of multiple cylinders with individual taps)
MTP080190I	Thread Adaptor for Italian makes (1/8-28 GAS)
MTP080190J	M6 Thread Adaptor
MTP080190M	Engine Temp Probe
MTP080190N	Remote Terminal
MTP080190Q	Software for PC connection to allow external printing and display
MTP080190R	Radio Frequency r.p.m. pickup

NOTE: Additional options available, please call 1-877-HDEQUIP to get the MTP080190 configured to your needs. This is not a stocked item. (60 – 90 day lead time.)

WARRANTY: Two years.

Supplied By: Motion Pro

Authorized Tool and Equipment Program

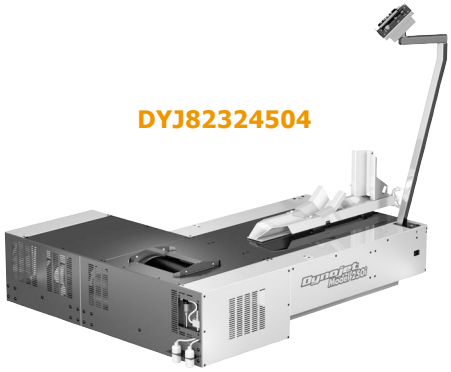
TO ORDER CALL: 1-877-HDEQUIP (433-7847)

Dynamometers/Ring Compressor/Tester/Gauge

Model 250i Inertia and Load Control Dynamometer

The Model 250i load control dynamometer is perfect for engine break-in, durability testing and fuel injection mapping. It's like getting two dynos in one package as all the features of the Dynojet inertia dynamometer are maintained.

The design is easy to operate and provides the function of steady-state load control. Dynojet's Load Control System uses the latest in eddy current power absorption technology, which combines with our easy-to-use software, so any technician can get repeatable, consistent results. The load control software provides the technician with the ability to control vehicle r.p.m. or speed at any throttle opening. Through our exclusive closed loop software design, the vehicle is automatically held at your predetermined setting.



DYJ82324504

Features:

- Eddy current brake capable of 858 ft.-lbs. absorption.
- Closed loop control of speed or r.p.m.
- Test vehicles at full or partial throttle.
- Compact design.
- Easy-to-use software, push button operation.

Models:

DYJ82324504	Above-ground
DYJ82324700	Pit

Model 200i Inertia Dynamometer

Through the use of state-of-the-art computer technology, Dynojet's Model 200i dynamometer allows you to quickly, accurately and reliably diagnose performance problems. By simulating the best "seat-of-the-pants" road testing right in the shop, problems are easily diagnosed in a fraction of the time. Shop sales, service work and credibility all benefit with a Dynojet chassis dynamometer.

Features:

- Quick-mount wheel lock and safety strap for easy (1) person loading.
- Durable and maintenance-free design.
- Precision balanced and knurled drum with large tire contact patch.
- Starter system (enclosed).
- Control pod and stand included.
- No calibration required.

DYJ82313504

Model:

DYJ82313504	Above-ground

Two-Band Piston Ring Compressor, 55 – 127 mm (2-1/8 – 5")

Model No. RC40C

RC40C

Clutch control holds tension band in position as piston is inserted into cylinder. 1/2" wide spring bands equalize tension over belt width so ring assembly may be compressed into groove until flush with piston. "V" beads on lower edge of belt keep tool from entering cylinder. Key wrench included.

Compression Tester

Model No. EEPV303A

0 — 250 p.s.i. gauge attached to a 25" flex hose. Quick coupler connection uses flex style adaptors allowing access to hard-to-reach spark plug holes. Includes the MT26J200R 14 mm adaptor for both flat and tapered seats.

EEPV303A

Includes:

EEPV304A	Adaptor, 10 mm.
EEPV306A	Adaptor, 12 mm.
MT26J200R	Adaptor, 14 mm.
PB128	Plastic storage box.
MT24DA1	Check valve (quantity of 6).

Fuel Pressure/ Vacuum Gauge

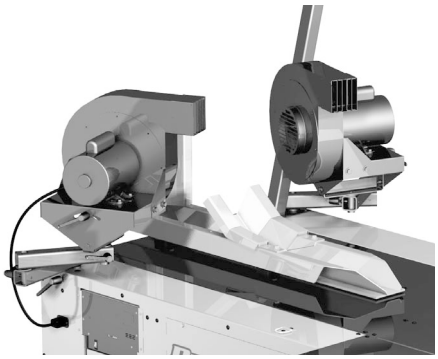
Model No. MT14G15SV

The upper half of the gauge reads vacuum with a range of 0 – 28" of mercury. The lower half reads fuel pressure with a range of 0 – 15 p.s.i.

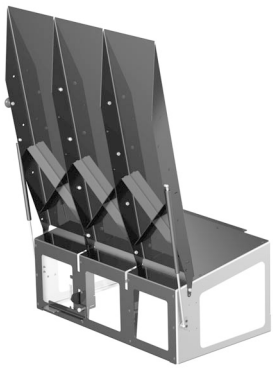
MT14G15SV

Supplied By: Dynojet/Snap-on/Sun

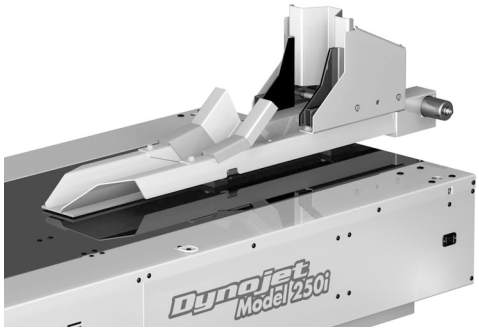
Dynamometer Accessories



DYJ76722003

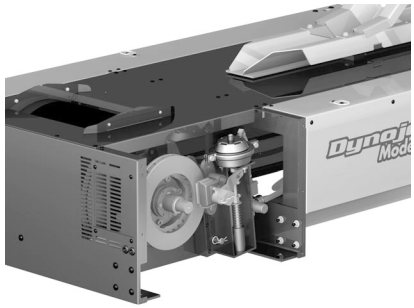


DYJ82944001



DYJ82943001

DYJ61329101



DYJ63920005

Dynamometer Above-ground Accessories

Models:

DYJ71323003	Extended Carriage. Recommended for cycles with longer wheelbases, up to 102"
DYJ76493005	Air-Fuel, Integrated. Integrated A/F Kit, pod control
DYJ76722003	Dual Fan. Pod controlled 110 volt, dual 2000 c.f.m. fans on articulating arms
DYJ61329101	Monitor Tray. Supports monitor, keyboard and mouse in convenient position for operation while seated on bike
DYJ82944001	Folding Ramp. Includes gas assist struts
DYJ82943001	Power Carriage. Control from the pod
DYJ71329000	Power Wheel Clamp. Control from the pod
DYJ63920005	Air Brake. Switch operated air-over-hydraulic disc brake (requires 75 p.s.i. line pressure). Not used with Model 250i
DYJDM150050	Fatboy Adaptor. Wheel strap for securing solid disc, non-spoke front wheels to carriage

Dynamometer Pit Accessories

Models:

DYJ71323005	Extended Carriage. Includes Power Carriage
DYJ76493003	Air-Fuel. A/F Kit with external pump, for use in pit applications
DYJ71329002	Dual Fan. Dual 2000 c.f.m. fans with Modular Base System
DYJ71329001	Monitor Arm. Articulated arm and tray supports monitor, keyboard and mouse in convenient position for operation while seated on bike
DYJDM150050	Fatboy Adaptor. Wheel strap for securing solid disc, non-spoke front wheels to carriage

Supplied By: Dynojet

Authorized Tool and Equipment Program

TO ORDER CALL: 1-877-HDEQUIP (433-7847)

Dyno Test Rooms

Dyno Test Rooms

INC offers a complete line of affordable, functional dyno test rooms just right for any dynamometer setup. Designed and constructed of rugged 4" thick, high performance industrial-duty acoustical panels and components called Panl-Wall®, these dyno test rooms are easy to install, easy to modify as your needs change and easy to move and grow with your shop. Design and performance features of the dyno rooms have been developed and tested specifically to work well with Dynojet motorcycle dynamometers and equipment.

Features:

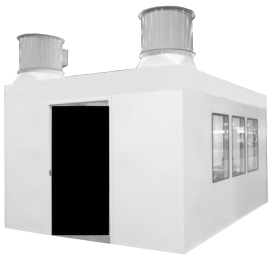
- A pre-engineered modular building system.
- 8' ceiling height.
- 4" thick high performance acoustics.
- (2) high performance ventilation packages.
- Double glazed safety viewing windows.
- Heavy-duty acoustical doors.
- Factory exterior paint finish.
- Each room is shipped complete with (1) window, (1) door and all the necessary wall and roof panels, joiners, finishing trims and assembly instructions.
- Quiet ... safe dyno runs.

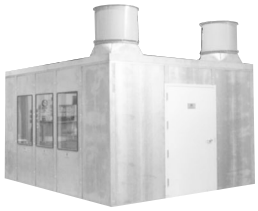
Models:

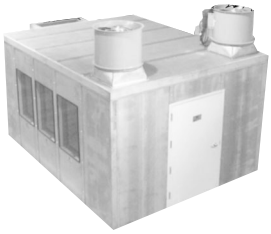
INC1012BDR	10' x 12' basic dyno room
INC1015BDR	10' x 15' basic dyno room
INC1215BDR	12' x 15' basic dyno room
INC1218BDR	12' x 18' basic dyno room

Options:

INCA3DR	3' personnel entry door
INC6DBDR	6' double entry door
INCAWIRE	Prewired light and electric
INCWDW	30" x 42" window
INCPRM	Exterior primer
INCPRMF	Exterior primer and medium gray finish







Vent Systems

(2) ventilation systems are available specifically designed for use with the INC dyno rooms, each consisting of a complete, silenced exhaust and inlet air assembly shipped with all necessary openings in the dyno room, fans, silencers and exhaust capturing hoses.

Models:

INCSTDVS	Develops about 12,000 c.f.m. air capacity and is recommended for dynamometers with inertia only
INCCSPRVS	Develops about 24,000 c.f.m. air capacity and is required for all dynamometers with load devices such as a Dynojet Model 250i

Program Benefits!

- One-stop shopping.
- Products from the best sources in the service equipment industry.
- Competitive lease rates.
- Knowledgeable customer service representatives.
- Special purchase opportunities throughout the year.
- Price matching.
- And much more ...